

NUTRIENTS FOCUS GROUP
Kickoff Meeting
16 August 2005

ATTENDEES: Bill Thomas, SSJWC; Emily Alejandrino, CVRWQCB; Stephen Clark, Pacific Ecorisk; Lenwood Hall, UMD; Dania Huggins, CVRWQCB; Mike Johnson, UCDavis; Julie Anne Langill, CVRWQCB; Margie Lopez Read, CVRWQCB; Bill McKinney, ESJWQC; Rob Mikkelsen; Jay Rowan, CVRWQCB; Claus Suverkropp, Larry Walker & Assoc.; Leticia Valadez, CVRWQCB

I. INTRODUCTION

Margie Lopez Read opened the meeting by referring to the agenda on which indicated the following points:

1. Adequacy of monitoring parameters
2. MDL/ PQL appropriateness
3. Identification of excessive fertilization
4. Algae toxicity reports/significant growth

Bill Thomas gave a background on the Irrigated Lands Program, the Technical Issues Committee (TIC) and the concept behind for the formation of a Nutrients Focus Group for the TIC.

II. FOCUS GROUP OBJECTIVES

The Focus Group will consider the following objectives:

- A. To evaluate and recommend the appropriate nutrient parameters to monitor for the Irrigated Lands Conditional Waiver Program
- B. To consider effective barometers that would indicate a problem in with nitrification/biostimulation
- C. To consider effective data interpretation of nutrient monitoring results
- D. To be able to make recommendations to the RWQCB with respect to the above.

III. DISCUSSION

Open discussion was facilitated by Focus Group Chair, Bill Thomas. Initial discussions were centered on the agenda topics for this meeting. The following list of issues that had previously been suggested by various committee members and staff, were addressed

Nutrient monitoring is not required until Phase 2 of the MRP for Coalitions, although some coalitions are starting to monitor early, due to concerns about eutrophication.

There was some discussion about what is and what should be monitored, including Total Kjeldahl Nitrogen, Ammonia, Nitrate, or Nitrite, Nitrate+Nitrite, Total Phosphate, Orthophosphate, or dissolved phosphorus. There was also some discussion about what detection levels were appropriate or necessary to determine the effect of nutrients on water quality, as well as what was readily achievable by commercial laboratories.

After considerable discussion, it was agreed that no changes would be recommended to the chart on the revised Coalition MRP for nutrients, with the possible exception of the

addressing the low detection level for Nitrate and clarification of the designation of “NO₂ as N, rather than as Nitrate.”

There was a discussion regarding interpretation of Biostimulation, and acknowledgement that although there is no Basin Plan limitation for nitrogen or phosphorus, there is narrative language in the basin plan regarding biostimulation. How can this be interpreted? What plants are desirable/undesirable, and what are the secondary impacts of biostimulations (such as low DO or changes in pH)?

Contributions to biostimulation were discussed including natural soil characteristics, air transfer, fertilizers, and grazing or wild animals. Other programs that are in place to deal with this include the Dairy Program, Confined Animal Feeding Operations, and Rangeland practices.

Alternatives to chemical analyses in the monitoring program might include chlorophyll as a measure of algae growth, or perhaps including digital photos along with sample collection process.

There was also a discussion regarding the dichotomy of testing for algae toxicity to evaluate the effect of pesticides or metals on water quality, as well as the measurement of nutrients to evaluate excessive biostimulation. There was a possibility that carrying the algae toxicity measurement through to report significantly different increase in growth as well as growth reduction with respect to the control, might be an alternative to help understand both types of impairments.

IV. NEXT STEPS

From all the above points discussed the group agreed that the following tasks need to be considered before the next meeting:

- A. The group should start to focus on some background information to base any possible suggestions that might be applicable to the Region. Some of the references that were suggested are:
 1. Historical review of nutrients in the Central Valley from existing programs such as TMDL in the South San Joaquin and Clear Lake, Region 7, South Lake Tahoe Biostimulation Studies, and DWR studies of zooplankton and phytoplankton in the Delta, and by the USGS on the Mokelumne River.
 2. Evaluate EPA references, and other States to determine their procedures for determining excessive biostimulation.
 3. Steve Clark from Pacific Eco Risk will provide information regarding toxicity tests for potential uses of chlorophyll as nutrient analysis and the disadvantages of using the values from this test.
 4. Randy Dahlgren from UC Davis has 2-3 years of data in nutrient studies, which Mike Johnson from UC Davis would locate and provide to the group.

B. Discuss an appropriate a monitoring plan to include a review all the proposed MDL/PQLs

C. A series of questions were formulated during this meeting. It seems that it would be helpful if the Focus Group could help develop some 'Frequently Asked Questions', as well as answers to recommend to the CVRWQCB. Some of these questions might be:

1. Why had nutrient monitoring been included in the waiver monitoring?
2. Why was nutrient monitoring put in the second phase of monitoring?
3. Have there been any problems identified with nutrient issues in the Central Valley, other than at specific locations (i.e., Stockton ship channel) or as a result of issues which are otherwise being addressed by other Regional Board water quality programs (i.e., confined animal and diary programs).
4. Are coalitions expected to have extra monitoring sites as a result of Phase 2 monitoring changes?
5. No date or time was established for the next Nutrient Focus Group Meeting.